7

The New York Central Railroad

1831-1915

The New York Central Railroad

The New York Central Railroad as now consti-
ed represents 186 predecessor companies, and the
al consolidation of these companies on December
1914, created one of the greatest railroad organ-
tions in the United States, and at the same time
nted an important landmark in the history of rail-
d transportation.

Each of these constituent companies, large and
ll, passed through many vicissitudes of construc-
and financing; struggles with popular opinions
laws; until finally a great transportation machine
completed for the public good.

A brief sketch of this evolution of The New
k Central Railroad, from its beginning to the
ent time, may be of interest to those who have
the students of the development, and especially
ose who have participated in it for so many years
heart, mind and money.

AH Smith

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Early Development in New York State.

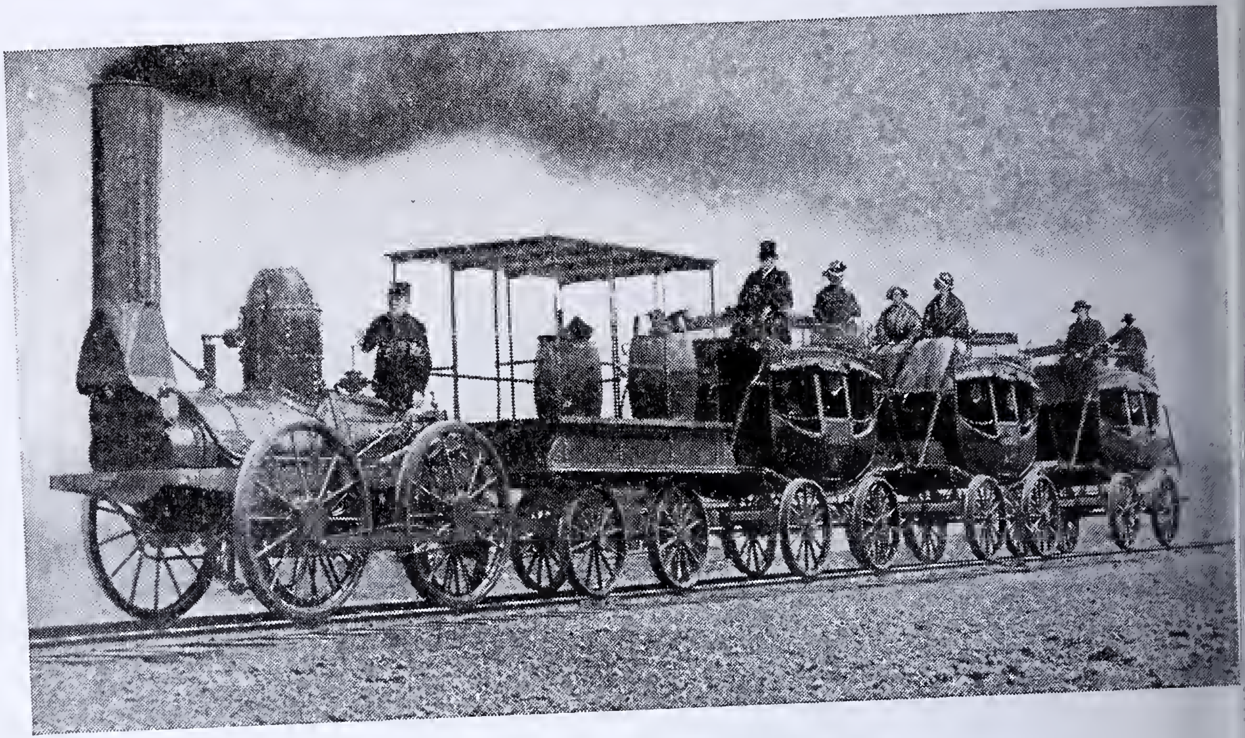
THE Mohawk & Hudson Railroad Company was chartered in 1826 to build a line from Albany to Schenectady, and the road was opened to the public on August 9, 1831. Inclined planes, up which stationary engines pulled the cars by ropes, raised the passeners one hundred and eighty-five feet at Albany and one hunred and fifty feet at Schenectady to the level of the new road. etween these planes extended the strap rails, a distance of sixteen iles, on which, if all circumstances were favorable, the little igine "De Witt Clinton," with its remodeled stage coaches, might tain a maximum speed of fifteen miles an hour. The whole ain then had but a fraction of the weight of a modern locomove alone, and this great difference is but typical of the owth that has taken place in railroading in these eighty odd ars.

The tiny Clinton and its midget coaches are still preserved at est Albany, as a reminder of the comparatively insignificant ginnings of "America's Greatest Railroad" and of the early orts to satisfy the need for improved methods of transportatn.

In the face of vigorous opposition from those who could see in i nothing of good, the road prospered; the De Witt Clinton was sceeded by other locomotives, larger coaches were provided, ad by 1844 a new road had been completed which made it possle to abandon the inclined planes.

In 1826, five years before the Mohawk & Hudson Railroad bgan operations, the Erie Canal had been opened. The State hd contributed large sums to its building and fostered its growii commerce in every possible way. Therefore, it does not seem s surprising that an application, made in 1831 for a charter to cistruct a railroad from Schenectady to Buffalo, was refused by the Legislature, as establishing a dangerous competitor to the canal. Even in 1836, when, in response to urgent demands of the public, a line from Schenectady to Utica was permitted, it was not allowed to carry anything but passengers and their ordinary baggage. In 1837, however, mails were added, and in 1844 consent was given to carry freight during the canal's closed season. Not until 1847 was this permission extended to cover the entire year, and then only upon condition that the railroad should pay to the State the same toll per mile for the freight carried as the canal would have earned had it transported the property.

This restriction was enforced on all lines within thirty miles of and competing with any canal in the State of New York, a was not removed until 1851.



The "De Witt Clinton" and Train, 1831.

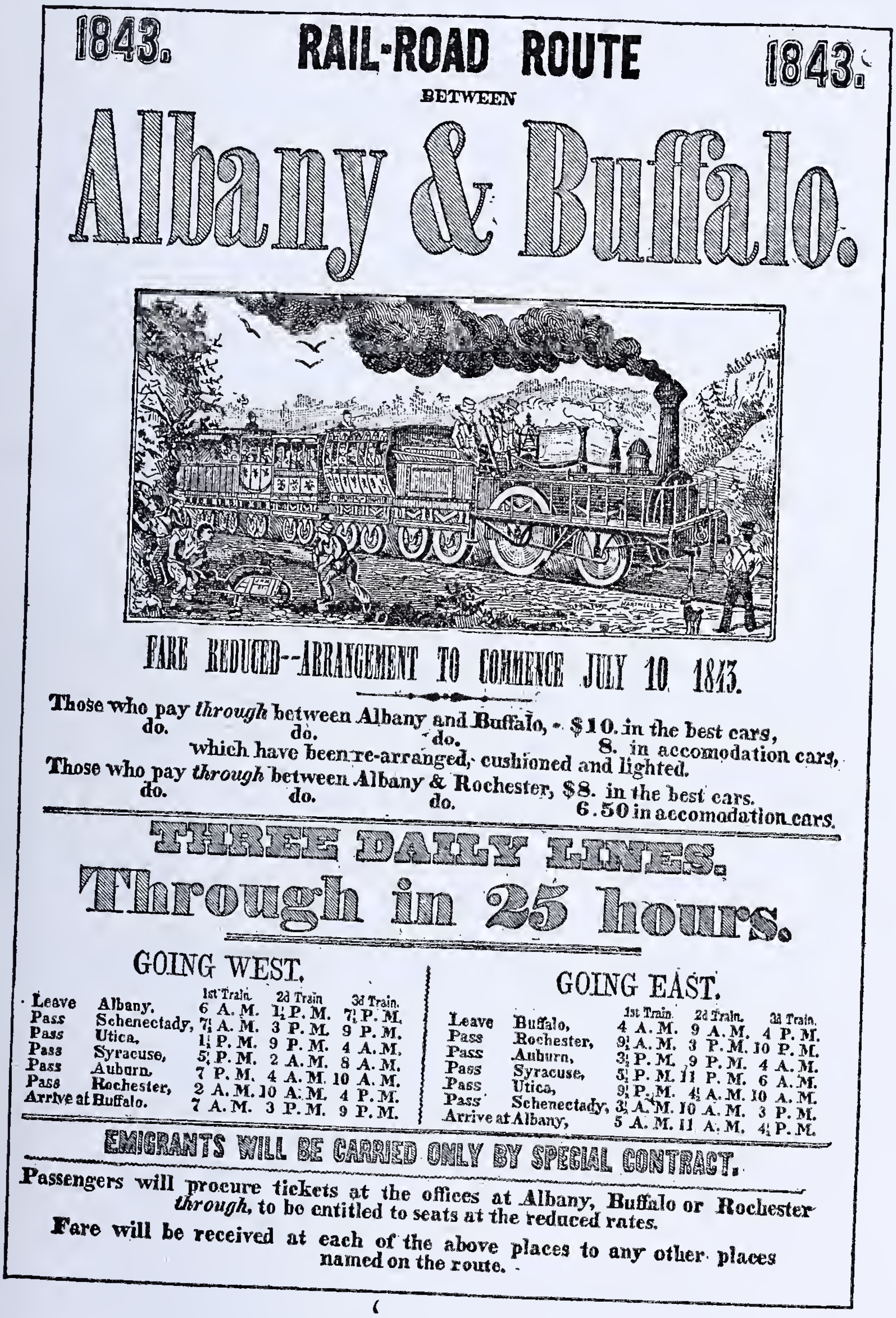
A road was opened from Rochester to Batavia in 1837; o from Utica to Syracuse in 1839; one from Auburn to Rochest in 1841; one from Batavia to Buffalo in 1842; and the followi year saw the closing of all gaps and the completion of a line fr Albany through to Buffalo.

A Fond Hope Realized.

These various roads were under separate names, ownersh and managements, but the hope expressed at the dinner wh celebrated the opening of the first of them all, the Mohawk

Hudson, that one might "breakfast in Utica, dine in Rochester nd sup with friends on the shore of Lake Erie," was now realized.

A historian of these early days writes: "By the beginning of 843 there was a rail route by which it was possible to travel from



1843. **RAIL-ROAD ROUTE** 1843.

BETWEEN

Albany & Buffalo.

FARE REDUCED--ARRANGEMENT TO COMMENCE JULY 10 1843.

Those who pay *through* between Albany and Buffalo, - $10. in the best cars,
do. do. do. 8. in accomodation cars,
which have been re-arranged, cushioned and lighted.
Those who pay *through* between Albany & Rochester, $8. in the best cars.
do. do. do. 6.50 in accomodation cars.

THREE DAILY LINES.

Through in 25 hours.

GOING WEST.

		1st Train.	2d Train	3d Train.
Leave	Albany.	6 A. M.	1½ P. M.	7½ P. M.
Pass	Schenectady,	7½ A. M.	3 P. M.	9 P. M.
Pass	Utica,	1½ P. M.	9 P. M.	4 A. M.
Pass	Syracuse,	5½ P. M.	2 A. M.	8 A. M.
Pass	Auburn.	7 P. M.	4 A. M.	10 A. M.
Pass	Rochester,	2 A. M.	10 A. M.	4 P. M.
Arrive at	Buffalo.	7 A. M.	3 P. M.	9 P. M.

GOING EAST.

		1st Train.	2d Train.	3d Train.
Leave	Buffalo,	4 A. M.	9 A. M.	4 P. M.
Pass	Rochester,	9½ A. M.	3 P. M.	10 P. M.
Pass	Auburn,	3½ P. M.	9 P. M.	4 A. M.
Pass	Syracuse,	5½ P. M.	11 P. M.	6 A. M.
Pass	Utica,	9½ P. M.	4½ A. M.	10 A. M.
Pass	Schenectady,	3½ A. M.	10 A. M.	3 P. M.
Arrive at	Albany,	5 A. M.	11 A. M.	4½ P. M.

EMIGRANTS WILL BE CARRIED ONLY BY SPECIAL CONTRACT.

Passengers will procure tickets at the offices at Albany, Buffalo or Rochester *through*, to be entitled to seats at the reduced rates.

Fare will be received at each of the above places to any other places named on the route.

Schedule of 1843.

any to Buffalo in thirty hours without changing cars more n six times. There were no through tickets or no baggage ks. A ride over each of the seven independent roads was a plete transaction in itself. When the passenger got to the end of the road, he hunted up his baggage, if he had any, had i chalked to the next stopping place, bargained with expressme and hackmen for transfer to the station of the next road in line bought a new ticket and took a fresh start. By 1850, the scienc of railroading had progressed so far that the traveler could pur chase through tickets between Albany and Buffalo for $9.75 though he could not obtain, at any price, any information upo which he could rely about the movement of trains."*

In 1848, a schedule was made for through trains from th Hudson River to Buffalo in the unprecedented time of twenty two hours. The railroad now known as the Boston & Alban having been previously opened, there was thus created a throug line from the Atlantic Ocean to the Great Lakes, except for th ferry across the Hudson at Albany, which river was not bridge until 1866.

The Original New York Central Railroad.

Having a through line, it was generally agreed that it wou be better to unite the various roads, so that they might be operat as one, under a single management. To this end, application w made to the State Government, and on the second of April, 185 an act was passed sanctioning the arrangement. In May of t same year, an agreement was entered into by the ten compani concerned, looking toward their consolidation into one corporati under the name of the "New York Central Railroad." Directo of the new company were elected at Albany on the sixth day July, 1853, and it began to operate the line with its own office on the first of August following. Thus, sixty-two years ago, t name "New York Central" came into existence. First applied those lines which ran through the middle of New York State, now represents a network of tracks affording transportation the most prosperous and densely populated section of our count

The Hudson River Railroad.

When the Mohawk & Hudson Railroad was opened, in 18 steamboats between New York and Albany had been operated twenty-four years. It was long believed impossible to excel speed the palatial steamers which plied the Hudson; and the r of fare between the two cities of one dollar, which competit reduced at times to fifty cents, and occasionally to twenty-fi discouraged early attempts at railroad building. Then, too, hysical difficulties of constructing a line close along the rugged hore of the river were many and severe.

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*Carter: "When Railroads Were New."

The Harlem Railroad Company also opposed the plan for a iver road. The Harlem Railroad was planned so as to reach lbany from New York by a route far enough back from the Iudson River to avoid direct competition with the popular steamoats, and at the same time to furnish means of transportation uring the closed season of navigation.

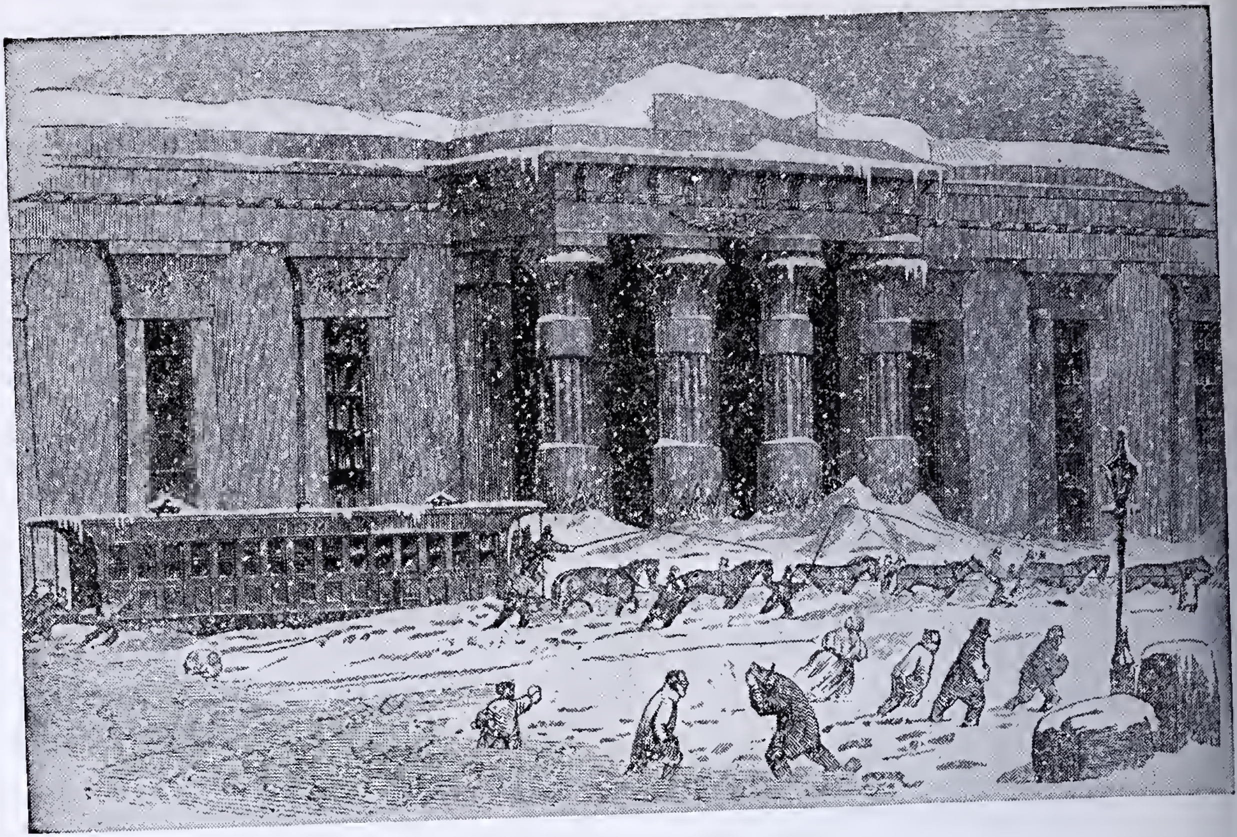
Applications for charters for railroads along the river shore ere made from time to time, but the opposition was strong and l were refused until 1846, when the Legislature gave its con- nt, and in July, 1847, the Hudson River Railroad was opened om what is now West Thirty-second Street to Breakneck Hill, ty-three miles from New York and near the present station lled Storm King. In 1849 the road reached Poughkeepsie, and the first of October, 1851, operations were extended to the vn of East Albany.

When Horses Drew the Cars.

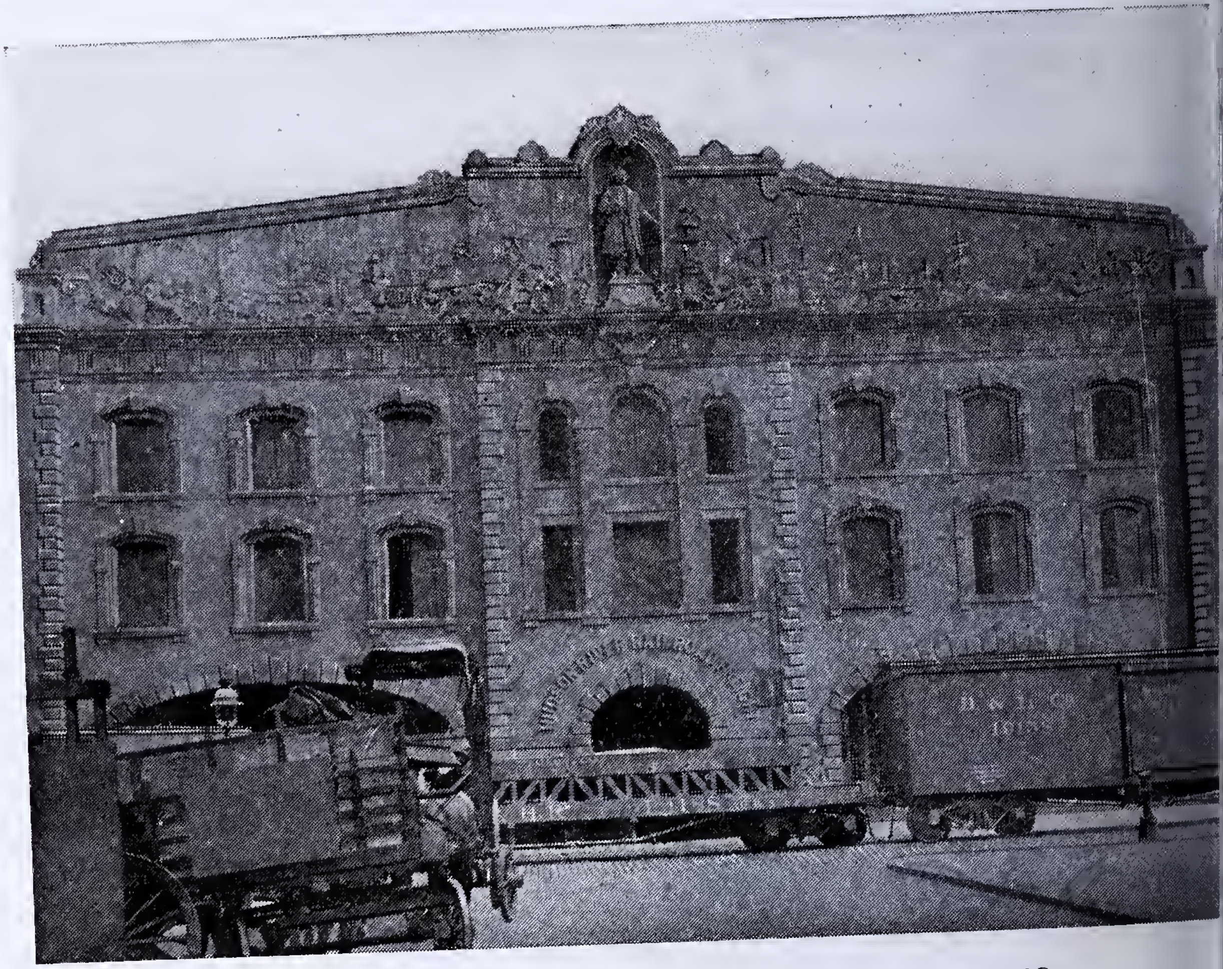
Meanwhile a passenger station had been located at Chambers eet, from which point the cars were hauled by horses up to irtieth Street. The line thrived as the country became more ckly settled, and its freight business, as well as passenger, took goodly proportions. In 1868 the road opened a large freight tion opposite St. John's Church, where a park of the same name merly existed, which was a favorite resort in those days for w Yorkers. That name the station still bears and, amid its v changed surroundings, it still presents to view the wonderful nze frieze that depicts, on either side of the statue of Commo- e Vanderbilt, the marvels of land and water transportation.

The operation of passenger trains down the west side of Man- an Island continued nearly twenty-five years; for it was not l November 1, 1871, that the completion of the Spuyten vil & Port Morris Railroad, which connected the Hudson er and the Harlem Railroads, permitted them to reach the Grand Central Depot, then just dedicated to the public ice.

An item of interest, indicating the prosperity of the Hudson er Railroad, is found in the fact that in 1866 it ordered from land six thousand tons of steel rails, which, it is believed, was earliest introduction of such rails, in quantity, into the United es.



New York Central Train Drawn by Horses, Passing Old Tombs Prison, En route from City Hall to 26th Street Station in the Fifties.



Freight Depot at St. John's Park, Built in 1868.

With the bridging of the Hudson River at Albany in 1866, there was a continuous rail line from New York to Buffalo, controlled by two separate companies. Consolidation of these followed as the natural and desirable next step, which was taken by an agreement dated September 15, 1869.

The new company was called the New York Central & Hudson River Railroad. Under this name the "Central" led the way in that era of railroad development following the Civil War, and it soon became known the world over as typifying the highest standards in railroading. In the acquisition of feeder lines and by gaining control of a number of other roads, it also became the nucleus of the great system known as the "New York Central Lines."

The Lake Shore & Michigan Southern.

In the same year that the two roads connecting New York and Buffalo were consolidated, the Lake Shore & Michigan Southern Railway Company was formed by bringing together the three rincipal companies owning the roads between Buffalo and Chi- ago. The history of these roads, however, runs back to the early ays of railroad promotion.

Once the railroad had demonstrated its practical value, the eople west of the Alleghanies were as clamorous for their intro- uction as were their friends on the seaboard. The Territory of ichigan, with a population at that time of but 35,000, chartered e Erie & Kalamazoo in 1833. This road was laid with a thin on ribbon on oak stringers, and was opened for traffic in 1837, e motive power at first being horses. This company is still in istence, but for years its property has formed a part of the Lake ore System under a perpetual lease.

Another road was built by the State of Michigan from Mon- e, on Lake Erie, to the interior and was opened for traffic as far Hillsdale, sixty-seven miles, in 1843.

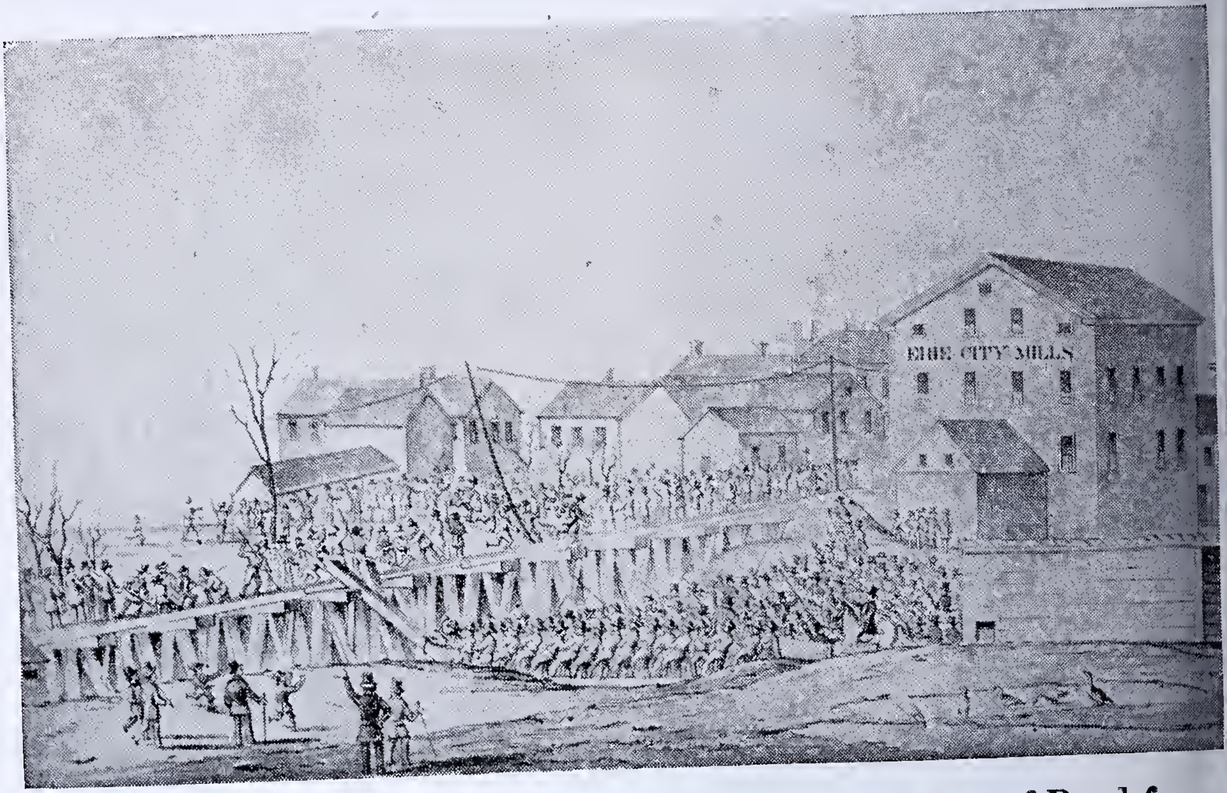
The story of railway construction in this territory is one of eat financial difficulties, bankruptcies, contending factions and nmunities, and disastrous competition. In 1853 it was planned change the gauge of a short section of road so that through ins might be run, but the innovation was so strongly resisted the citizens of Erie that some of them resorted to mob vio- ce, which came to be known as the "Erie war," and it was lly put down only by establishing martial law.

Out of a large number of incorporations and small roads there urally evolved a trunk line connecting important traffic centers.

This, with its feeders, became an important factor in the upbuilding of the country, and incidentally made a strong corporation which afforded better security to its owners and greater service to its patrons.

In May, 1852, the first train ran between Toledo and Chicago in 1853 between Toledo and Cleveland, and in the following yea between Cleveland and Buffalo.

To a Quaker named Nehemiah Allen is given credit for firs proposing a railroad along the shore of Lake Erie. At that tim "the idea of a railroad presuming to compete with the large, lux urious and swift steamers plying between Buffalo, Cleveland an Detroit seemed so preposterous that he was regarded as a crank



Scene of Riot at Erie Resulting from Change of Gauge of Road for the Operation of Through Trains.

No move was made to build a road east of Cleveland until July 1849, when books were opened for subscriptions for the stock the Painesville, Ashtabula & Geneva Railroad, which was open for traffic November 20, 1852. In spite of all predictions that railroad could never compete with the lake, this road earned di dends. A small stock investment reluctantly made by the city Cleveland formed the principal part of that city's famous sinki fund."*

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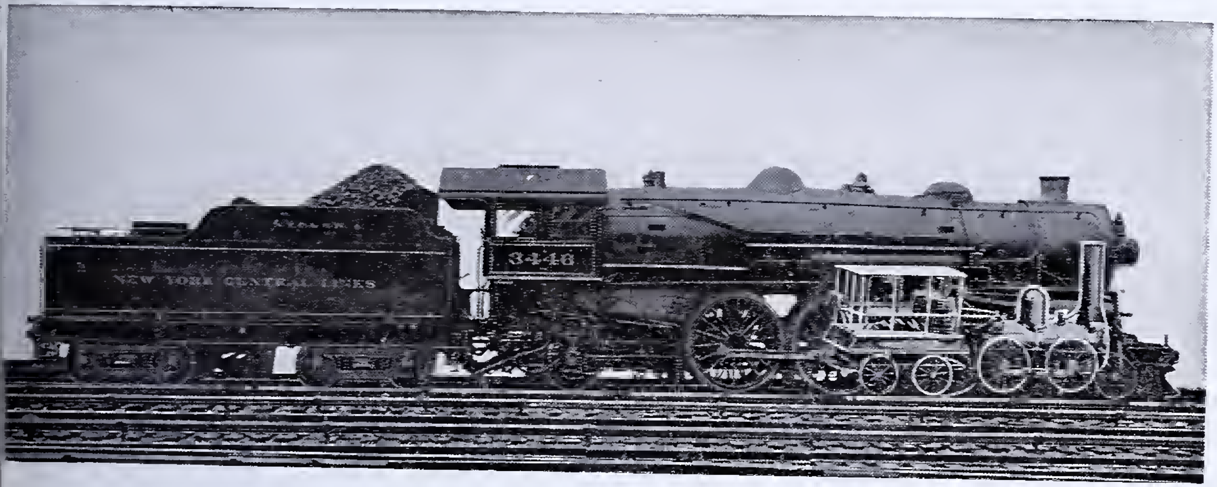
* Carter.—"When Railroads Were New"

Having the advantages of a very superior location on what is ractically a water-level route, and being a pioneer in a country hich enjoyed a very rapid growth and great material prosperity, is not strange that the Lake Shore Railroad prospered. In pur-uance of a policy perhaps ultra-conservative, for many years iat company provided for its improvements and growth wholly ut of its earnings, with a result that it had a great reserve trength to carry it over hard times and to enable it to meet the erce competition to which, in common with other roads, it was equently subjected.

As soon as a through route had been established between Buf-alo and Chicago, nothing was more natural than that the Lake hore should ally itself with its strong neighbor to the east, with hom it might exchange the heavy traffic moving between the



The "De Witt Clinton" Engine and Tender, Which Weighs 12,000 Pounds, or Less Than the Weight of One Pair of Wheels of the Modern Engine Shown, Which Weighs 427,000 Pounds.

incipal ports on the Atlantic seaboard and the Western gate-ys.

In 1873 Commodore Vanderbilt, who was then President of New York Central & Hudson River Railroad Company, ame President of the Lake Shore & Michigan Southern Rail-y Company, and from that time down to the recent consolida-n the general policy controlling these two large properties has n the same.

The New York Central of To-day.

On December 23, 1914, The New York Central & Hudson er Railroad Company, The Lake Shore & Michigan Southern ilway Company, and nine of their subsidiaries—having altogether about 5,600 miles of road and about 14,000 miles of single track, or about half the girdle of the globe—were consolidated into one company under the name of The New York Central Railroad Company.

It is difficult, from mere statements of figures, to give an idea of the extent of the operations of the New York Central Railroad, but these are of great interest when properly interpreted.

Its trains traverse eight States. Two-fifths of the population of the United States live here and produce twenty-five per cent of the farm crops, forty-eight per cent of the mine products, and sixty-five per cent of the manufactures, while occupying but ten per cent of the area of the land. The New York Central, with its directly controlled lines, reaches twenty-two of the fifty cities in the country which have each a population of 100,000 or more.

The prosperity of the New York Central clearly is bound up with the industries which it serves. Business conditions whic bring the mills into full operation, keep the factories busy, an cause the coal to move as fast as it can be mined, create for th railway an enormous volume of traffic. It is then that the company's 3,700 locomotives, 147,000 cars, and 75,000 employes ar able to render full service to the great population from which it revenues are drawn.

It has approximately 400 points of contact with other carriers It owns a majority of stock of the Michigan Central Railroa and the Cleveland, Cincinnati, Chicago & St. Louis Railway Companies, and affords to them and to the vast regions which thei railroads traverse the highest class of service for the people an the industries of the East and Middle West.

Facilities and Earnings.

The enormous increase in facilities and earnings which hav taken place between the dates of the first and latest consolidation may be seen from the following:

In 1853. Ten Companies consolidated into the New York Central Railroad from Albany to Buffalo.		**In 1914.** Twelve Companies c solidated into the N York Central Railro from New York to Chicago.
307	Passenger Cars	3,608
1,702	Freight Cars	143,414
$3,151,514	Passenger Earnings	$62,273,848
$2,479,820	Freight Earnings	$105,858,426
563	Miles of Track Operated	14,537
$1,125,506	Dividends	$12,127,525

In the thirteen years ending December 31, 1913, the gross rev- nues of the roads now making up the New York Central Rail- oad doubled, and the growth has been steady as well as large.

A comparison between 1914 and prior years should only be nade with the fact in mind that the industrial depression of 1914 rought about a condition which made it impossible to utilize the lant of the company in any degree corresponding to its normal apacity. The results also indicate the effect upon the revenues f other factors which have combined to deplete the net earnings f all roads in the country during the past few years. The most nportant of these is the general rise in prices which has, in turn, rought about demands for higher wages, the awarding of which, requently by arbitration boards, it was not possible to offset by ny adequate change in the rates of transportation. The results re reflected in increases on what is now The New York Central ailroad since 1910 of $14,594,343, or 21 per cent in wages, as ompared with an increase of less than 14 per cent in revenues.

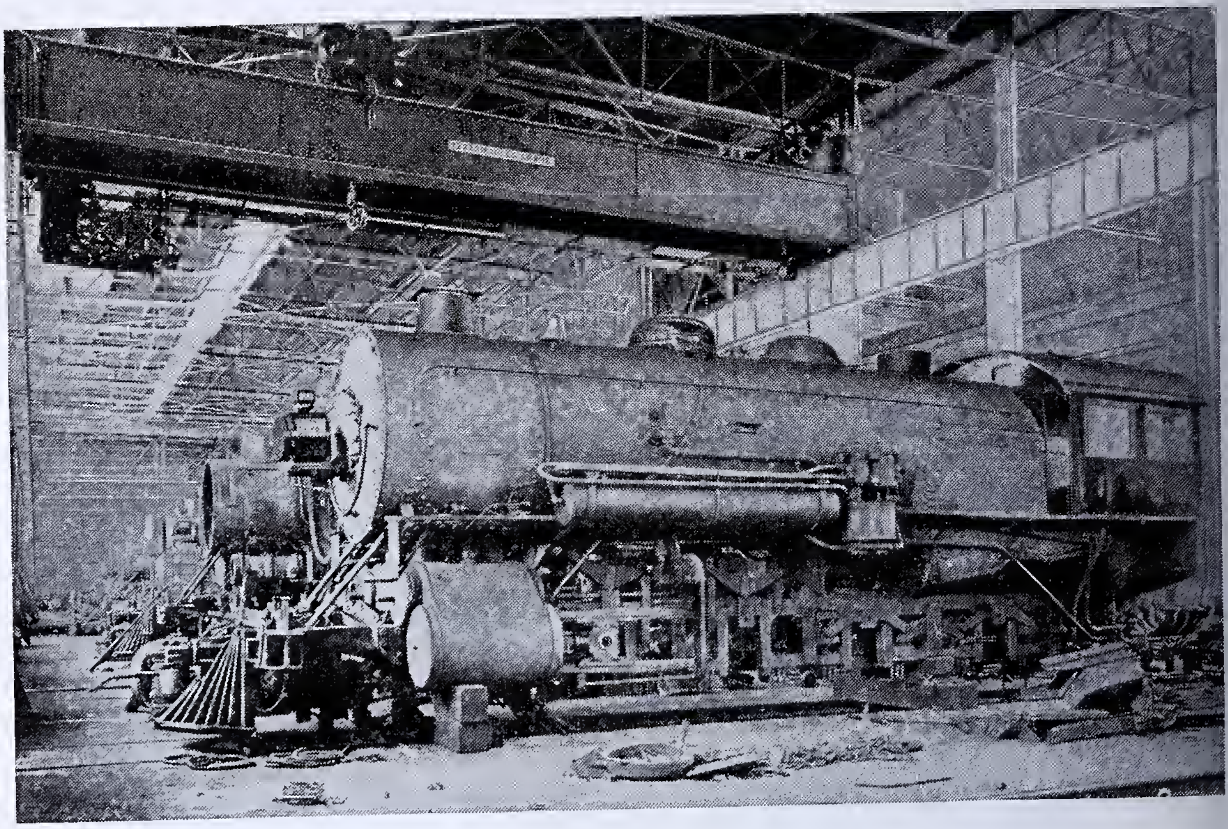
General View of New York Central Car and Locomotive Shops at West Albany, N. Y.

Results of Efficiency in Operation.

In the year 1914 the revenues of the New York Central were duced by $18,000,000, but this enormous loss was met in part retrenchment in operating expenses to the extent of $15,500- 0, of which $6,000,000 was in the direct cost of transportation. astic measures were necessary to effect this economy; many ployes had to be laid off in all departments; the program of improvements was largely postponed, and the expenditure of every dollar for the purchase of supplies was scrutinized.

In periods of declining business, it is very difficult to reconcile the public mind to a reduction in service corresponding to the loss in business. Necessarily, the big machine must be slowed up gradually, and everything that reasonably could be done was accomplished, except that sacrifices were not permitted where questions of safety in operation were involved.

Operating efficiency is by no means a thing of recent development. For years the management has been constant in its labors to promote it. Improved methods in shops, yards, round houses, offices, everywhere, in short, that there was an opportunity for them; improvements in appliances that would enable better results to be had with a lesser effort; improved methods of firing engines making for economy in the use of coal; improvements in engin construction, for the same purpose; the strictest economy in th use of supplies; these are some of the many ways by which th ratio of transportation expenses to gross earnings was kept at th same figure in 1914 as in 1906.



Locomotives Undergoing Extensive Repairs.

Care of Equipment.

The New York Central has, in round numbers, 3,700 locomotives and 147,000 cars, which, coupled together, would reach from ew York to Chicago and considerably beyond. To maintain his enormous amount of equipment in high-class condition re-uires an army of over 15,000 men, with five large locomotive hops, five large car shops, 30 district car shops and 75 engine erminal shops, involving an annual outlay in wages of $20-00,000 and in material of about $15,000,000.

Official Commendation.

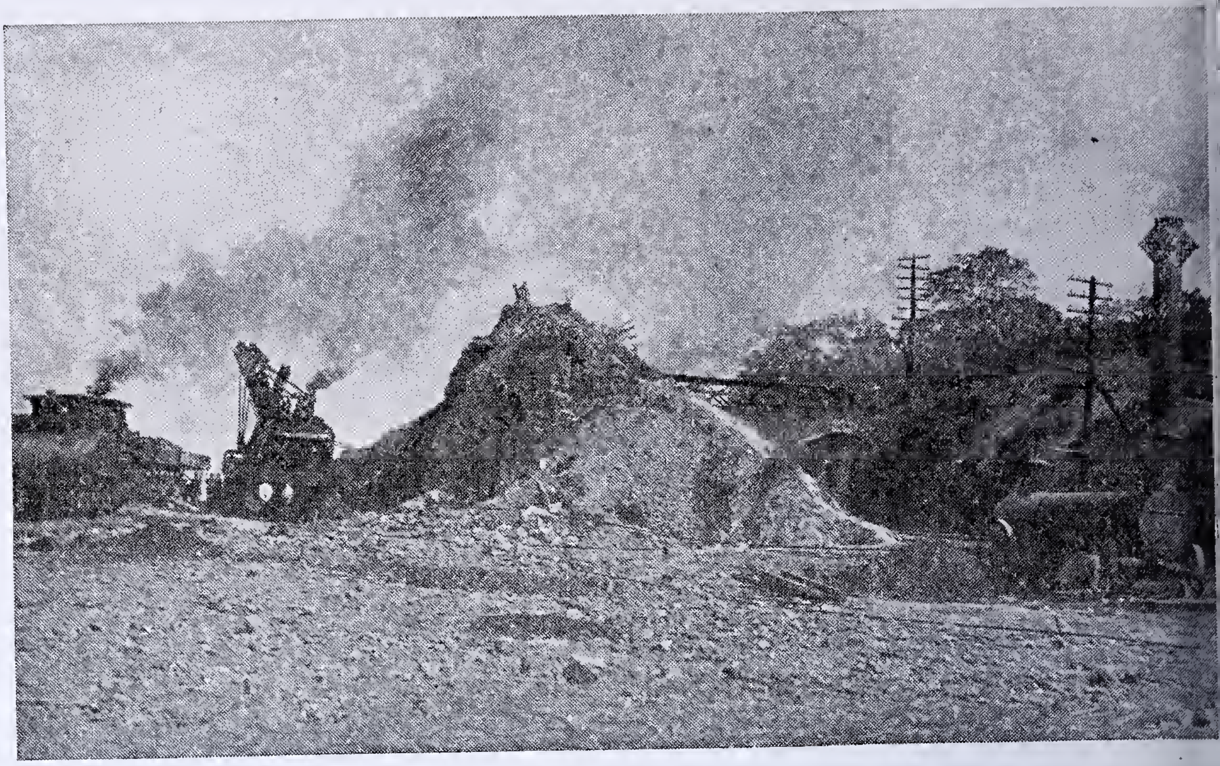
How well this work is done is shown by the report of the ublic Service Commission, Second District, of the State of New ork, upon its inspection of the motive power of the New York entral & Hudson River Railroad in 1913, which stated:

Steel Dining Car Built at New York Central Shops, West Albany.

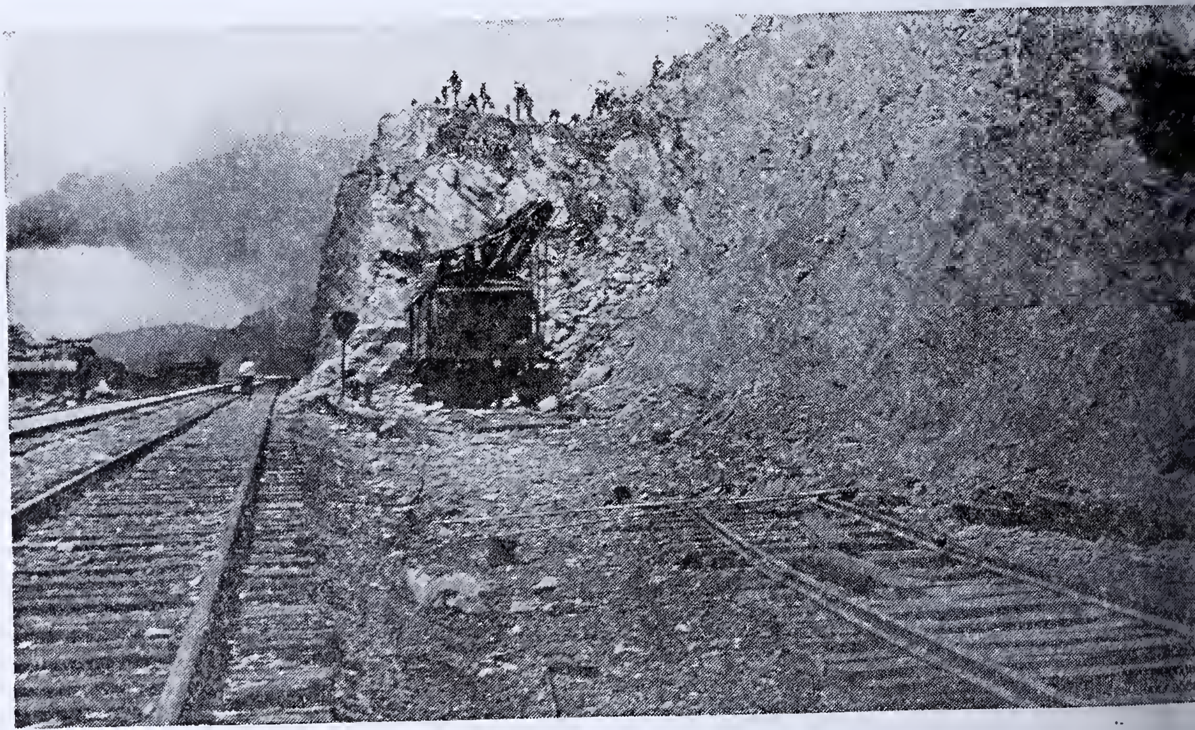
> "We consider that the power of this railroad is at the present time in better condition than that of any other railroad of its importance in this section of the country."

The report of the same Commission of its inspection in 1914 stated:

> "The locomotive equipment was found to be in general good condition, and better than at any previous inspection made by the Equipment Department."



Whittemores Cut, North of Beacon, Showing Method of Excavating from the Rear to Avoid Interference with Traffic While Four-tracking Hudson Division.



St. Andrews Cut, North of Poughkeepsie, from which 87,000 Cubic Yard of Rock Were Excavated in Connection with Four-tracking Hudson Division.

Constant Outlays Required.

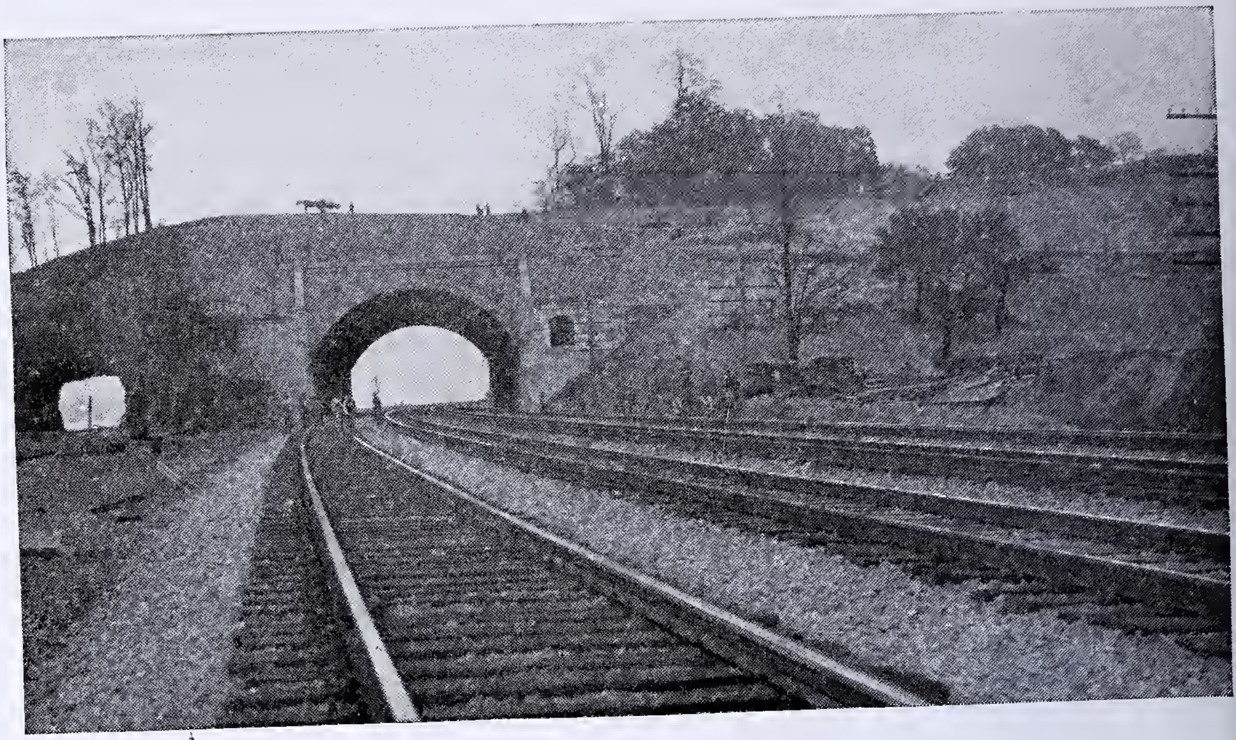
Standards of physical condition upon railroads have been raised rapidly in recent years, partly in response to public opinion, but also because of the efforts of the management to increase the capacity of the road in advance of actual traffic needs. Every expenditure for the elimination of grades or curves, or for better station facilities, or for improved devices upon tracks or equipment, means in the end an ability to handle the traffic with less friction and with greater dispatch, thus increasing the capacity for handling new business.

Almost the only class of improvements in the railway "plant" in which the general public takes a direct interest, or in which it is able to appreciate the tangible results gained, is in the erection of new passenger stations. For this reason, the building of the Grand Central Terminal in New York City is regarded as perhaps the greatest public triumph of the New York Central. Other splendid stations have been erected recently, notably the one at Utica, costing, together with yard improvements, some $4,500,000, and that at Rochester, costing $2,500,000.

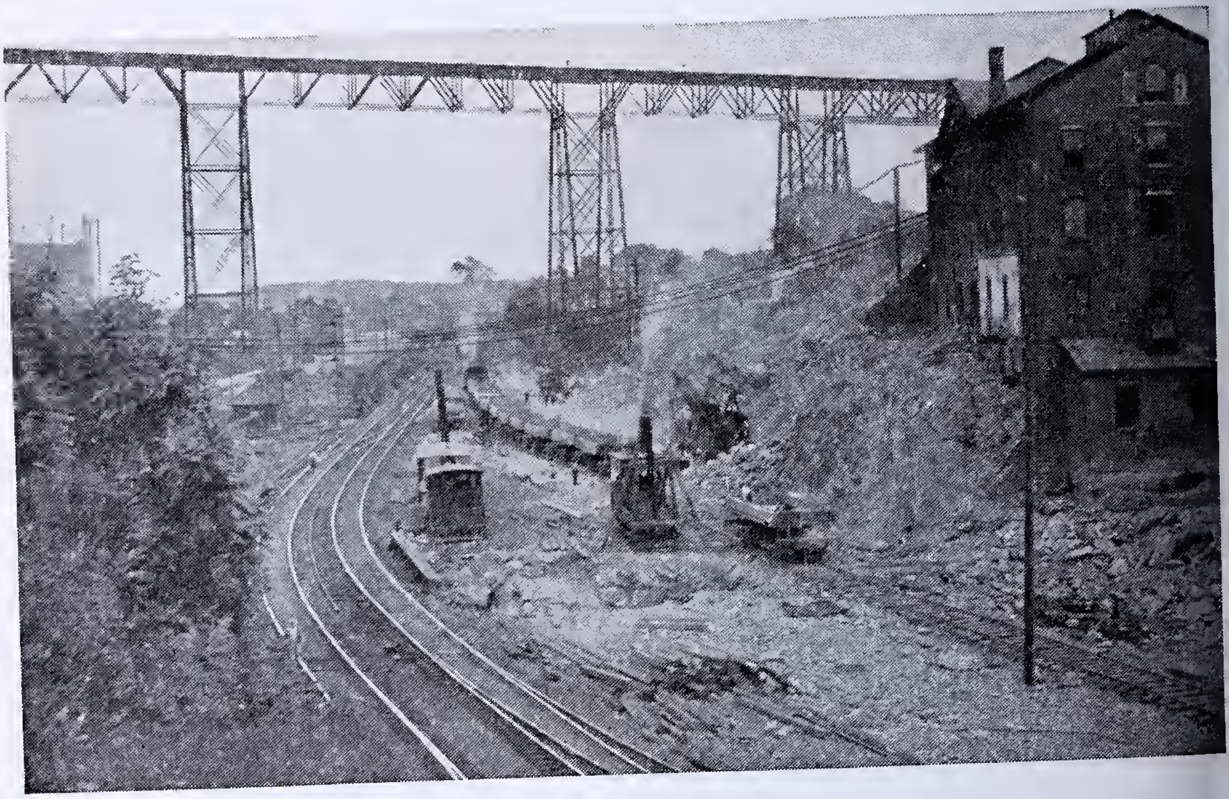
But the public should not forget that other improvements and etterments are constantly being carried on at huge cost, though nany of them are hidden from the public eye.

Some of the more important recent outlays for betterments are he following:

or four-tracking along the Hudson River during the past five years, with the necessary new signalling and new station facilities, over	$25,500,000
imilar work on the Harlem Division has cost nearly	7,500,000
he Rome improvement, undertaken in connection with the construction by the State of the Barge Canal, amounted to nearly	1,000,000
he building of the immense Gardenville freight yard, to enable trains to be handled outside of the congested districts of Buffalo, involving also the elimination of several crossings of highways at grade, required to complete over	3,000,000
ade crossing elimination in the City of Buffalo, and track work in connection with same, reached	3,000,000
her station and yard improvements east of Buffalo came to	1,500,000
w signalling cost	2,500,000
ork on yards, stations, shops and other facilities west of Buffalo	14,000,000
ectrification in New York City suburban territory with necessary equipment, power houses, etc., cost nearly	20,500,000



New Concrete Tunnel at Rhinecliff, in Connection with Four-tracking Hudson Division. The Old Tunnel is Shown on the Left.



Cut at Fallkill Creek, North of Poughkeepsie, in Connection with Four-tracking Hudson Division.

Millions for New Construction.

Summed up, over **$78,000,000 have been** put into physical improvements, the most of it in the four years prior to 1914. All this work has been of the most enduring character. It has been done in the best manner known to the art of modern railroad construction. Into it have been placed the best materials obtainable, evolved from processes which are the results of thorough and scientific investigations.

Therefore, when it is stated that since January 1, 1900, the New York Central & Hudson River Railroad and the subsidiaries now consolidated with it, have expended in additions, betterments, new construction and new equipment, the enormous sum of $400,000,000, it should also be emphasized that this money was expended in the most careful manner and in ways calculated to produce the best possible results from the investment.

Electrification.

The electric installation is now complete from New York to Harmon, on the Hudson River, and to North White Plains, on he Harlem line.

The service has been extended to a considerable distance eyond the limit prescribed in the Act of the Legislature requiring hat electric operation be installed through Park Avenue. Vhether this has resulted in any substantial increase in commutng traffic beyond its normal growth is questionable. Owing to he present great cost of equipping railroads for electric operation nd of operating them, it has been deemed inadvisable to extend ie electrification beyond the restricted area included in the elecric zone.

In this problem of operating high speed trains by electricity, ie New York Central was practically the pioneer in the world; id in the reliability and safety of the new service, the Company as established a record of which it may well be proud.

The adherence to schedules in the electric zone is remarkable. f course, it is not always possible to equal the record of August 1914, in which twenty-four hours not a delay occurred the Electric Division to any one of the three hundred and nety-eight revenue trains that were run over its rails, but daily is unending stream of travel flows and ebbs with scarcely ever delay.

The Passenger Service.

The consolidated New York Central Railroad is the greatest passenger-carrying road in the United States. It is difficult for the mind to grasp the full meaning of the statement that in the year 1914 the three lines now forming the chief constituents of the united roads transported 62,161,954 passengers, or a number greater than three-fifths of the population of this country. The distance traveled would have been equal to the carrying of 2,520,439,275 passengers one mile, a figure staggering to the imagination.

And, notwithstanding this great volume of travel, its trains are operated with a seldom failing regularity of schedule, and what is more important, with a high degree of safety. In the four years ending with December 31, 1914, not a single passenger fatality occurred in a train accident on the lines now composing the new organization, though they carried in that period passengers numbering more than twice the entire population of the United States.

A well-known illustration of its passenger service is afforded n the Empire State Express, the first high-speed passenger train of the United States, now in its 25th year of operation on the New York Central Railroad, with a record of over 6,000,000 miles run and 8,000,000 passengers carried safely to destination.

During these 25 years of railroad evolution the weight of this rain has increased 200 per cent, due to the demands for steel equipment. It is now hauled by a powerful modern Pacific type ocomotive having a weight 200 per cent greater than that of the amous old No. 999 which hauled the Empire State Express during the early days of its history and which attained such an nviable reputation throughout the country.

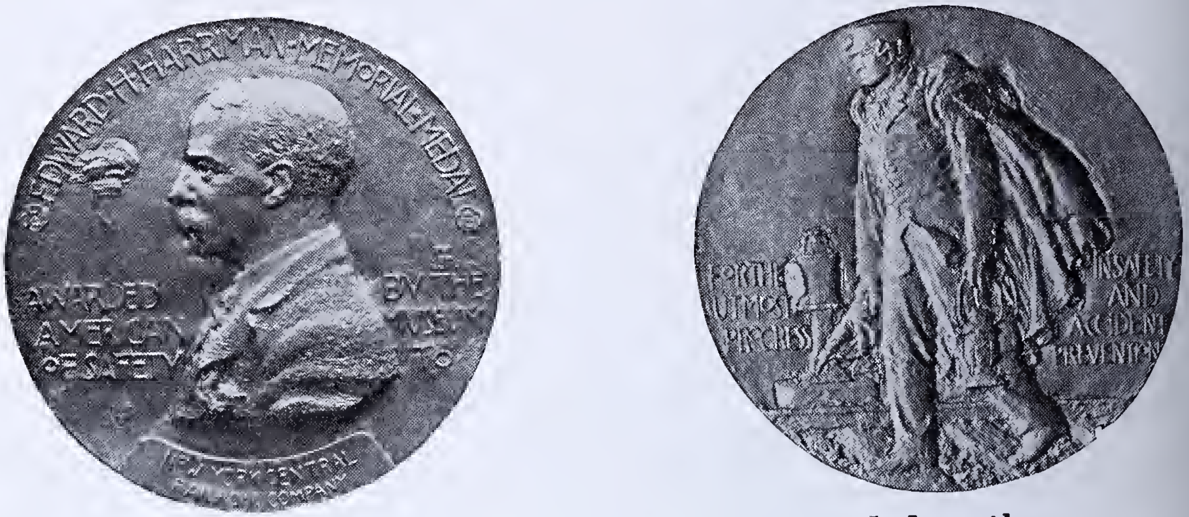
The cost of the train has advanced 300 per cent; the wages f employes have increased 45 per cent; the number of passengers andled per train has increased only 75 per cent, and the revenue arned per passenger-mile has remained stationary.

Since the inauguration of this world-famous train, which has ome to be looked upon as a New York State institution, millions f dollars have been expended for modern signals, heavier rails nd bridges, and for many other track and equipment appur-enances necessary to make such evolution possible.

This train is an illustration of the additional cost of railroad peration made necessary by the demands of modern travel, and emphasizes the necessity for appreciation by the public of the eed of the railroads for consideration and legislation which will ake the continuation of such service possible.

Leaders in "Safety First."

"Safety First," as of paramount importance, was first emphasized on the New York Central in 1909, several years before the campaign for safety attained its present large proportions. At that time an officer of the Company delivered an address before the National Association of Railroad Commissioners, held in Washington, D. C., on the subject of progressive safety in railroad operation, and the New York Central & Hudson River was one of the first railroads to adopt the slogan and post it upon poles, bridges, buildings, etc. This railroad was also the first to employ a man whose whole time would be given to the teaching of this one principle, and to inspecting the yards, shops, engine houses and other places where men work.


EDWARD H HARRIMAN MEMORIAL MEDAL
AWARDED BY THE AMERICAN MUSEUM OF SAFETY TO
NEW YORK CENTRAL RAILROAD COMPANY
FOR THE UTMOST PROGRESS
IN SAFETY AND ACCIDENT PREVENTION

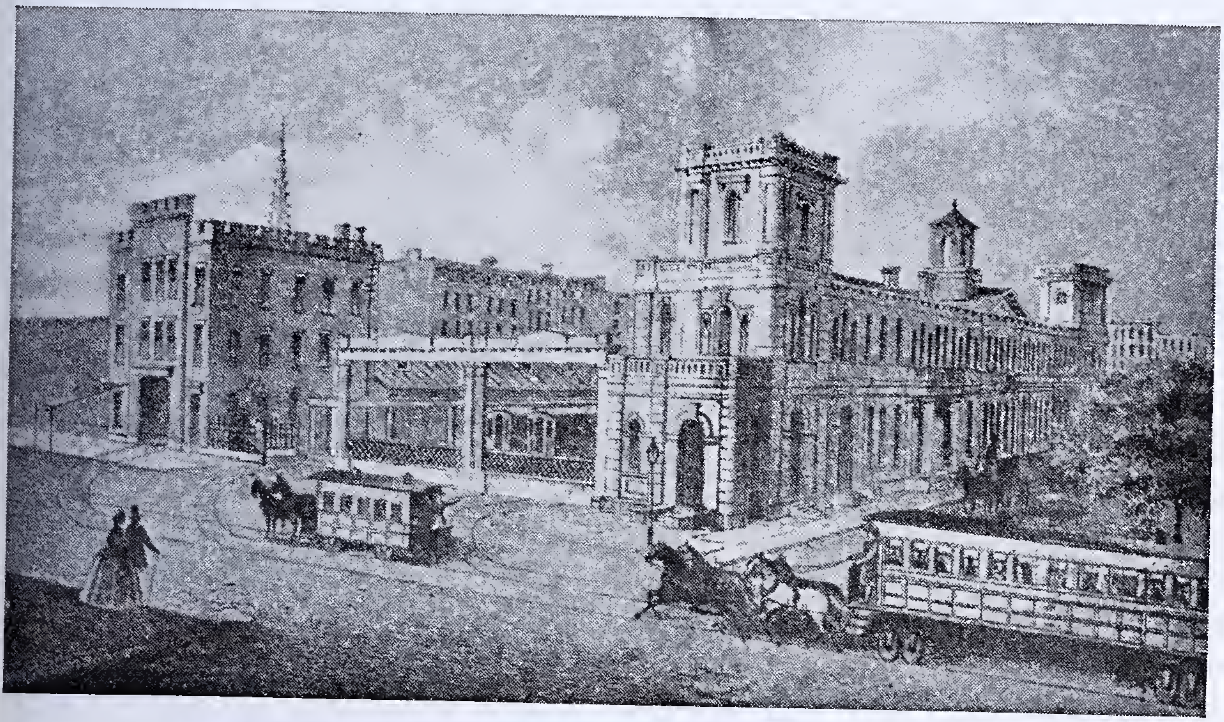
Reproduction of Harriman Medal, Awarded to the New York Central in 1915.

In the physical equipment of this railroad, many things hav been done to advance this cause. Electric block systems hav taken the place of the old manual blocking on some lines and o the station telegraph block on others. Machinery has been protected and safety appliances added in shops and engine houses Modern equipment of all kinds has been purchased. With th increase in the weight of the newer cars and larger locomotives the weight of the rails has kept pace, until now, in the high spee tracks, there is none weighing less than 100 pounds to the yar and for a considerable mileage east of Buffalo it is all of 10 pounds.

The Harriman Gold Medal.

Due recognition of the results attained came to this Compan in February, 1915, when the American Museum of Safety, havin in its hands for disposition the Gold Medal offered by Mrs. E. H. Harriman for "the utmost progress in safety and accident prevention," awarded it to the New York Central.

The splendid condition that had been reached on this railroad is best outlined in the words of the presentation, "The points upon which the award was made are: block signals, improved roadbed, steel equipment, modern safety devices, a safety bureau, the elimination of curves and grade crossings, high standard of efficiency of employes, improved ventilation, cleaning and disinfecting."



Harlem Railroad Station, 4th Avenue and 26th Street, 1857. Present Site of Madison Square Garden.

In accepting the medal, President Smith said in part:

"The gold medal to the company is for the stockholders, the directors d executives who, with their financial means, their constructive and ecutive ability, have determined and made possible the class of service hich ought to be rendered.

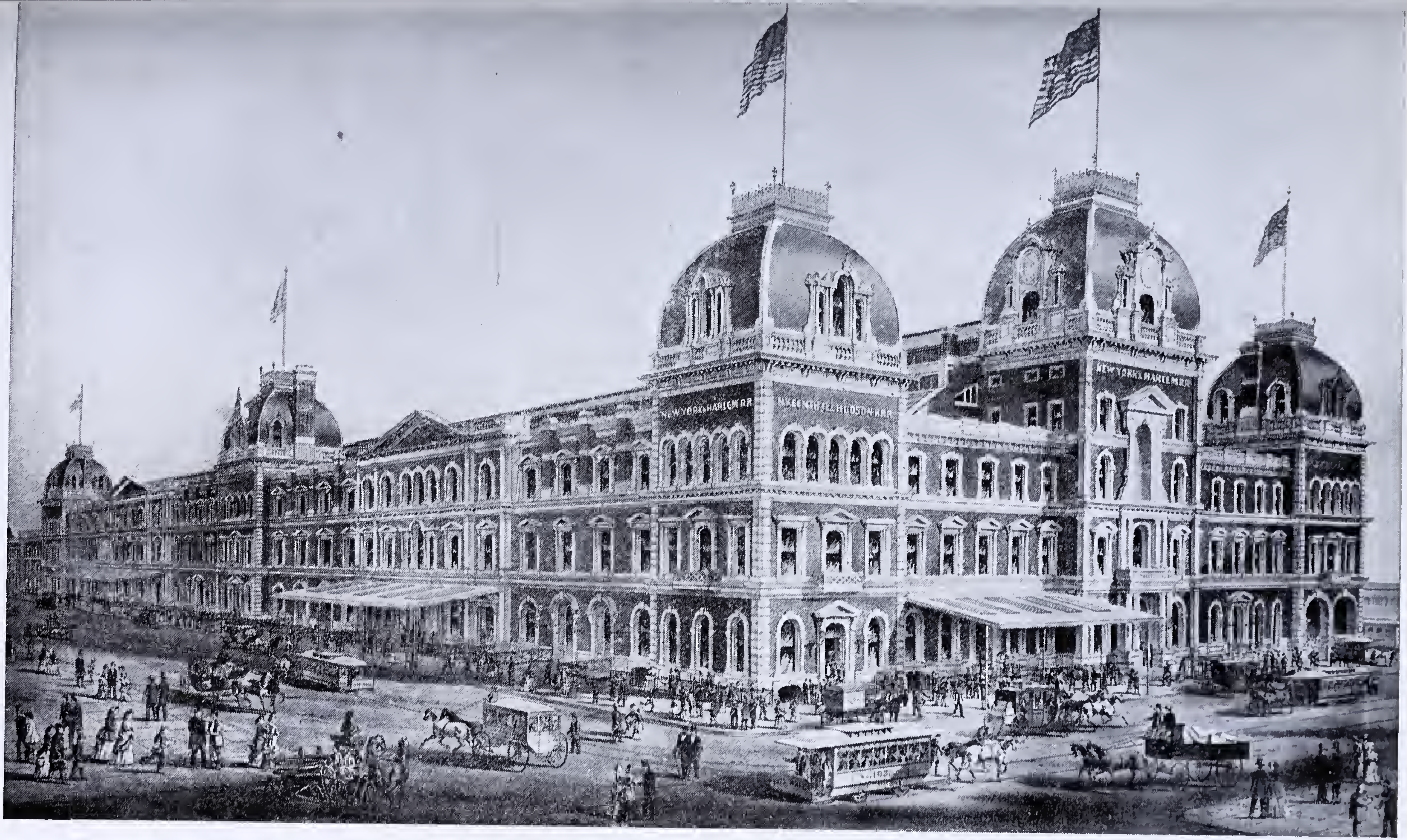
"This service, however, could not have been rendered without the co-eration of the great army of 50,000 men in the field, each having a stinct duty to perform, and yet all inseparably connected. Safety eant that every man had to do his duty—the laborers upon the track had place their spikes and rails properly, and keep them in that condition; e men upon the trains had to be vigilant in watching their signals and rforming their work; the men in the shops, yards, stations, offices, in e chemical and physical laboratories, and every officer of the company, had to be alert to see that his own duty was done and that the needs his fellowmen were met. It has been a question of eternal vigilance d co-operation which is our duty as public servants, and which we pe to continue.

"The award to the individual is in recognition of individual effor and fortunately has gone to a man who has conserved his life in th service as a locomotive engineer to his seventieth year, having followe that occupation over forty years without a blemish on his record, an during the latter part of his life, for a period of sixteen years, havin operated our 'Empire State Express,' one of the fastest trains in the worl This is the kind of service we need in the individual throughout the rank to get perfect safety."

Governmental Regulations.

Attention has been called to the fact that new standards o operation have followed the country's development, and in n less degree have other requirements been imposed upon the company by the process of legislation. The cost of many of thes will, no doubt, be absorbed in time, but the immediate effect ha been to reduce net earnings. With the increasing cost of government, the railroads have been called upon to pay higher taxes, th amount of which has grown out of all proportion to property o revenues. Unfortunately, other burdens have also been impose upon the Company by governmental agencies which add nothin to safety, comfort or convenience of operation, and contribu nothing to the support of government. However, there is som evidence of a better understanding of these problems on the pa of the public, and it is hoped that the reaction which appears be setting in will correct some of the abuses that have grown u under the guise of public regulation.

Northern View of Harlem Tunnel, Completed 1837.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First Grand Central Depot, 1871, Park Avenue and 42d Street.

Grand Central Terminal.

A story of the New York Central would be incomplete without at least a brief description of the Grand Central Terminal. It has been stated that with the single exception of the Panama Canal, no more difficult work has been undertaken in this age.

Incident to erection of that terminal, many hundreds of thousands of dollars had to be expended upon substantial but not permanent construction; new tracks, new signals and many other minor details had to be provided for temporary use, only to be torn out as the great work progressed. Whole areas of switches and tracks in service were lowered over night. The old train shed was taken down over the heads of passengers. New buildings were erected over moving trains and street travel maintained at several points over the construction. Gas, water and sewer pipes were changed without interruption to the service. Buildings in which people were living and working were underpinned.

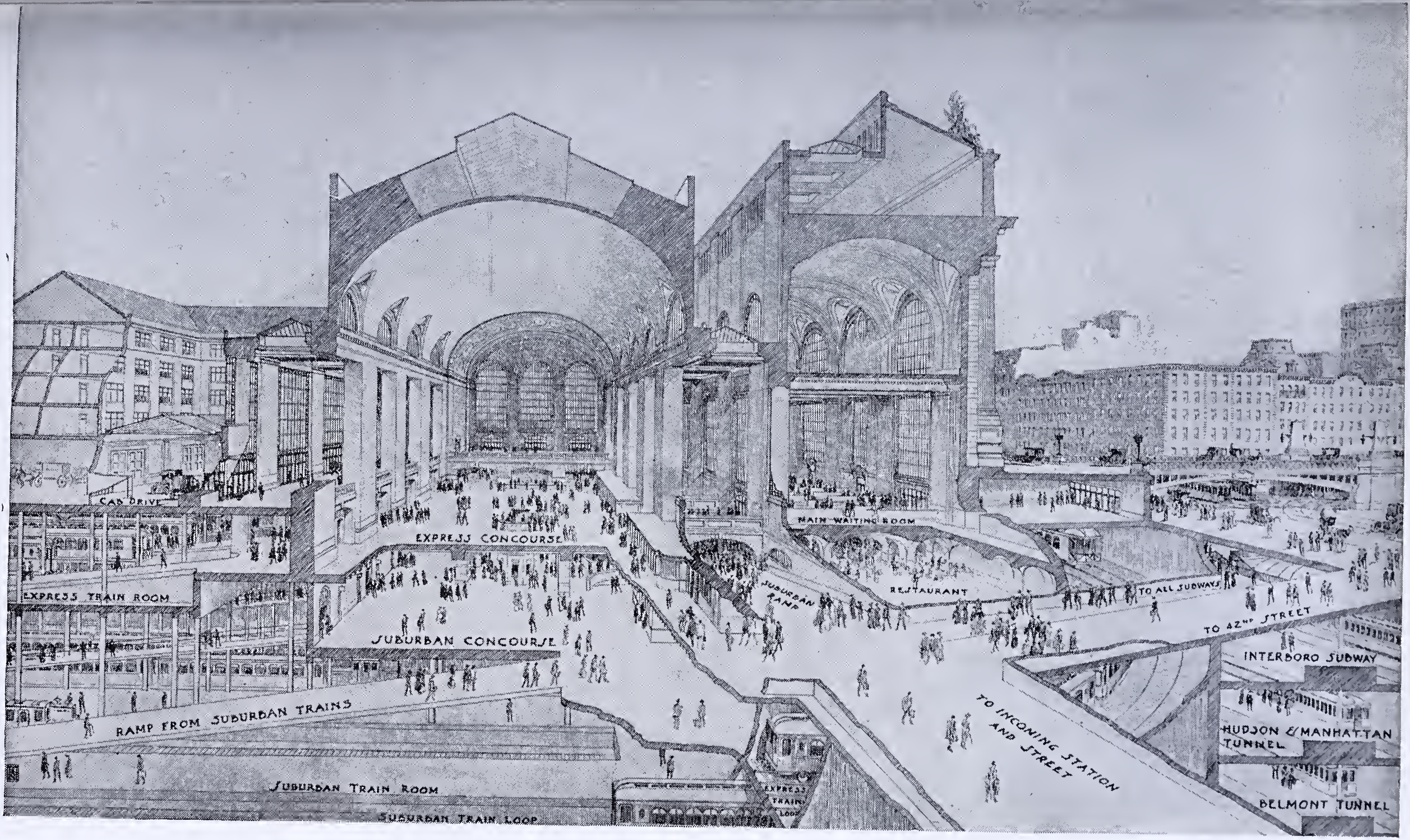
Over three million cubic yards of earth and rock were excavated, requiring the exploding of more than a million pounds of dynamite. More than 125,000 tons of steel were erected and more than 350,000 cubic yards of concrete put in. And so careful was the planning and so faithful the execution, that in all the years the work was going on the travel passed through this growing terminal without noticeable delay or the curtailment of a schedule or an accident to a passenger, though more than 150,000,000 passengers used the station while the construction progressed.

The Old Harlem Railroad Depot.

In a technical sense, the Grand Central Terminal is not located upon the line of the New York Central Railroad, but it occupies (and extends far beyond) the site of the Old Grand Central Depot, the first up-town depot of the Harlem Railroad.

That company was incorporated in 1831, and the next year a short portion of the road was opened for business. Its terminus was first at Centre Street, near City Hall. By 1837, it was in operation to Fordham, then in Westchester County, a distance of twelve and one-half miles, and was, as an early account quaintly specifies, "traversed for nearly three-fourths of its length by steam power." Horses hauled the carriages from the City Hall to a station located near the present site of Madison Square Garden.

One of the wonders of this railroad was the tunnel, which, our authority tells us, "extends along the Fourth Avenue from 91st



Sectional View of the New Grand Central Terminal.

to 94th Streets," and which, "among the thousands who are almost daily conveyed through it, a vast majority is impelled by a desire to examine."

First Grand Central Depot.

In 1857 the Centre Street station was abandoned, and in 1869 the first Grand Central Depot was commenced. Commodore Vanderbilt selected the site and gave the station its name. The woo which fed the locomotives of those days was cut in an open lo adjoining the site of the present Hotel Belmont, the saw bein run by a treadmill operated by horses, whose efforts to clambe up the never-ending incline were inspired, it is said, by wisps o hay suspended from poles just out of reach of their noses.

The new station, then well uptown, was an attraction tha called visitors from far and near. It had fifteen tracks, and eighty three trains, three of them through expresses to and from th West, arrived and departed every day. During its opening yea four million people passed through its doors.

More Room Needed.

Before thirty years had elapsed, the Grand Central Depot which had been thought an enormous structure at its opening, wa far too small, and in 1900 it was considerably enlarged. But thes additional facilities failed to provide for the rapid increase i travel. It was now felt that provision must be made for man years of expected growth and plans were begun accordingly.

In 1902 came the mandate of the Legislature requiring electrical operation through Park Avenue tunnel. This requiremen proved the key-note of the harmonious symphony of this splendid work. Without steam or smoke every track might be covere if need be, and upper and lower levels could be provided, allowin the separation of through and suburban travel.

Building for the Future.

Thus it was determined to build for the future, and early i 1904 the actual work was commenced, continuing year after yea slowly but none the less surely. On February 1, 1913, thoug the project was not fully completed, its utility and magnificenc were for the first time disclosed to an appreciative public.

The stately simplicity of the waiting room appeals to everyone, and the immensity of the concourse, whose lofty ceiling displays the starry heavens and the signs of the Zodiac, impresse itself on every traveler.

Comfort of Travelers.

Ample cause for favorable comment is found, too, in the manner in which everything has been made so easily available for the traveler. The spacious waiting rooms give opportunity for rest, if desired, before starting on the journey; in the concourse, conveniently arranged, are all the facilities necessary for departure—information bureau, railroad and Pullman tickets and baggage checking; here are the gates leading to departing trains, reached without the inconvenience of stairways.

Inclines take the place of stairways wherever possible; even a passenger from the commutation district, arriving in the lower level, forty feet below the street, finds himself out in the open air without climbing a step and without undue exertion. There is no crossing of the streams of travel, and the through and local passengers are entirely separated.

The great station provides, too, all reasonable comforts for its patrons. There are rest and smoking rooms, restaurants of different prices, little shops of many kinds, which the hurrying suburbanite may patronize at the last moment, even rooms where one may dress for an evening's entertainment—in short, all that careful forethought could devise to make the station most useful.

Some Facts about the Grand Central Terminal.

The main building at the street level is 600 feet long, 300 feet wide and 105 feet high; below the street level it is 745 feet long and 480 feet wide. The floor space of the station could accommodate 30,000 people at one time.

In 1914, including Sundays, there passed through the Terminal an average of 64,585 passengers per day; since January 1st it has averaged a little higher. It should be remembered that these re figures covering a period of acute financial depression. In ddition, an actual count made some time ago established the fact hat over 50,000 people per day not passengers enter and leave he station to patronize its various concessions, visit offices, etc.

During the year 1914, 174,564 train and 7,805 engines runing light, entered and left the terminal. The number of cars moved in and out numbered 1,124,531.

In comparison with the first Grand Central Depot of 1871, with its eighteen tracks, the new Grand Central Terminal has orty-two tracks on the upper level and twenty-five on the lower. The area of the terminal of 1900 was twenty-three acres; that of 913 is seventy-nine acres. The old terminal had a capacity in 900 of 366 cars; the present plant will accommodate 1,149.

The Terminal is not a mere monument to Transportation, but rather it should be regarded as the Gateway of the Metropolis of the New World.

The Keynote of a Great Organization—Service.

The fundamental idea upon which the whole organization has been built is "service"—service not alone to the traveling public, but to shippers, manufacturers and whole communities.

In order to develop transportation facilities between the great centers of population, the railroads have had to acquire, by lease or purchase, branch lines known as feeders. They have also had to gain through routes on which, by means of one common organization, the service might be standardized and the greatest economies effected. This movement has sometimes been viewed with distrust, sometimes actively opposed. But a large part of the public to-day realizes that transportation, more than any other industry, must be conducted on a large scale in order to gain the greatest economies. Not only does the public at large gain by the extension of uniform methods of operation over a large area, but hundreds of small communities enjoy the advantages of a high-grade service which an independent local road could not afford to give.

The New York Central, like some of the other great systems n this country, has followed out this policy—the history and results of which have already been told. It remains only to draw he moral—that the law of progress is the law of growth, of unity and of service.

Over the main entrance of the Grand Central Terminal may be seen these words:

"To those who with head, heart and hand toiled in the construction of this monument to the public service, this is inscribed."

May not this same sentiment be applied to all those who, with oresight and patient labor through many years, have erected a greater public utility—the New York Central Railroad?

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